Building Energy Conservation into Corporate Culture

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Impetus for Change

- High Energy Prices
- High Returns / Low Risk
  - ROI and Payback
- EPAct - requires that Federal agencies establish and maintain a program to ensure that "facility energy managers are trained energy managers.“
- Presidential Directives

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Best Practices

- Compressed Air
- Motors
- Process Heating
- Steam
- Textbook engineering problems related to system design, maintenance, or operation.

Industrial Assessment Centers

- 11,000+ plant assessments over 20+ years
- 60,000+ recommendations
- Top Ten Recommendations:
  - 1) Utilize Higher Efficiency Lamps And/Or Ballasts
  - 2) Eliminate Leaks In Inert Gas And Compressed Air Lines/ Valves
  - 3) Use Most Efficient Type Of Electric Motors
  - 4) Install Compressor Air Intakes In Coolest Locations
  - 5) Utilize Energy-Efficient Belts And Other Improved Mechanisms
  - 6) Insulate Bare Equipment
  - 7) Use More Efficient Light Source
  - 8) Reduce The Pressure Of Compressed Air To The Minimum Required
  - 9) Install Occupancy Sensors
  - 10) Analyze Flue Gas For Proper Air/Fuel Ratio

Summary of Findings

- Most recommendations
  - Tried and true technologies
  - Nothing esoteric
  - < 2-year payback
  - >100% ROI
- Yet less than half are implemented
- Why?

Barriers to “Go” Decision

- Inability to Communicate in “Finance Speak” to Convince Financial and Other Top Decision-Makers
- Private Sector - ROI, IRR, NPV
- Public Sector - Life-Cycle Cost Analysis
- Both - Simple Payback

Barriers to "Go" Decision

- Inertia
- Consideration of Energy Use as Fixed Overhead
- Attention on More Pressing Matters
- Energy Efficiency Experts as Separate Cadre with Own Culture

FEMP Success Stories

- Armed Forces
- California
- Leadership - Initiation
- Teams - Sustainment
- Financing Vehicles
  - ESPC
  - UESC

FEMP Success Stories

- Measurement and Verification
- Policy and Management Systems
- Communications and Training

For more information, please contact:

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